

IN THE CLAIMS

Please cancel claims 1-10 without prejudice or disclaimer. Please add the claims as set forth below.

Claims 1-10. (Cancelled).

11. (New) A method of producing toxin from *Bordetella sp.*, comprising cultivating *Bordetella sp.* bacteria that lack cysteine desulfinase activity; and isolating the toxin from the media, wherein the toxin is selected from the group consisting of pertussis toxin and pertactin.

12. (New) The method according to claim 11, wherein the *Bordetella sp.* are selected from the group consisting of *Bordetella pertussis* and *Bordetella bronchispetica*.

13. (New) A method of producing pertussis toxin, comprising cultivating *Bordetella pertussis* bacteria that lack cysteine desulfinase activity; and isolating the toxin from the media.

14. (New) The method according to claim 13, wherein the *Bordetella pertussis* bacteria are mutants having an DNA sequence integrated into a *Bordetella pertussis* cysteine desulfinase gene.

15. (New) The method according to claim 14, wherein the mutant is strain BP536pWY.

16. (New) The method according to claim 13, wherein the *Bordetella pertussis* bacteria are cultivated in the presence of cysteine desulfinase anti-sense sequences.

17. (New) The method according to claim 16, wherein the anti-sense sequences are 8 to 15 bases in length and complementary to a nucleotide sequence set forth in Figure 7.